Remarks

This Response and accompanying Request for Continued Examination (RCE) are responsive to the final Office Action (Paper No. 10) mailed November 6, 2003.

The Applicant has provided amendments hereinabove to the specification and claims. These amendments were previously submitted and denied entry by the Examiner on the basis that these amendments raised new issues that would require further consideration and/or search (see Advisory Action mailed February 11, 2004).

The amendment to the specification amends the title to better conform to the claimed subject matter.

Independent claims 34, 41 and 47 have each generally been amended to recite the predetermined value (threshold level) as being selected to control an output characteristic of the power supply. Support for these amendments is found in the application including the original language of claims 37 and 50; in the specification at page 1, lines 24-27 (last two sentences of last full paragraph on page 1); page 2, lines 5-9 (second full paragraph on page 2); and page 9, lines 13-17 ("One advantage of the current control system 300 over other designs is that the amount of voltage and current drawn from the power supply is limited. *Controlling the power supply in this manner* reduces high frequency current spikes seen on the power supply due to motor commutation switching during spindle motor start-up.").

Claims 40 and 41 have also been amended to improve the readability thereof. These amendments are believed to be proper, do not introduce new matter, and serve to place the application in proper condition for reconsideration and allowance.

Objection to Claims

The final Office Action objected to claim 40 due to the use of the phrase "a power supply." This has been changed to "the power supply," as requested by the Examiner.

Rejection of Claims Under 35 U.S.C. §102(b)

The final Office Action rejected claims 34-36, 38-40, 47, 48 and 51 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,574,608 issued to Fukuoka ("Fukuoka '608"). Claims 41-43, 45 and 46 were rejected as being anticipated by U.S. Patent No. 4,804,901 issued to Pertessis et al. ("Pertessis '901"). These rejections are respectfully traversed.

The Applicant submits that neither Fukoka '608 or Pertessis '901 discloses removing power from a load when the cumulative amount of charge is at least equal to a *predetermined value (threshold level) selected to control an output characteristic of the power supply*, as claimed by independent claims 34, 41 and 47.

Fukoka '608 detects a locked rotor condition in a motor 4 by charging a capacitor 35 with a constant current source 38. The capacitor 35 is subsequently selectively discharged when the locked rotor condition is detected. See, e.g., Fukuoka '608, col. 5, lines 15-42 and FIGS. 1 and 3. As the Examiner correctly notes, Fukoka '608 is silent with regard to how the capacitor value (and hence, amount of accumulated charge) is determined, and is further silent with regard to selecting the value based on an amount of charge that will cause a voltage spike.

Fukoka '608 thus cannot reasonably be viewed as selecting the predetermined value to control an output characteristic of the power supply, as claimed.

Pertessis '901 uses a capacitor 84 to selectively time the switching in and out of a start coil 16 during a motor start-up sequence. See, e.g., Pertessis '901, col. 9, line 61 to col. 10, line 6; col. 11, lines 55-66; and FIGS. 3 and 5. Pertessis '901 is silent with regard to how the capacitor value (and hence, amount of accumulated charge) is determined, and is further silent with regard to selecting the value based on an amount of charge that will cause a voltage spike. Accordingly, Pertessis '901 also cannot be reasonably viewed as selecting the predetermined value to control an output characteristic of the power supply, as claimed.

Rejection of Claims Under 35 U.S.C. §103(a)

The final Office Action rejected claims 44 and 49 under 35 U.S.C. §103(a) as being obvious over various combinations of Fukuoka '608, Pertessis '901, U.S. Patent No. 4,410,845 issued to Lockyear ("Lockyear '845") and U.S. Patent No. 5,017,854 issued to Gully et al. ("Gully '854").

These rejections are also respectfully traversed and the Applicant requests reconsideration and allowance of these claims on the basis that these claims depend from base claims believed to be patentable for the foregoing reasons.

Allowable Subject Matter

The final Office Action indicated that dependent claims 37 and 50 were objected to, but would be allowable if rewritten in independent form. The Applicant gratefully acknowledges this indication of allowability, and has amended independent claims 34, 41 and 47 as discussed above to generally incorporate subject matter from these claims relating

to the controlling of an output characteristic of the power supply, such as voltage or current. The Applicant therefore believes that the independent claims 34, 41 and 47 define subject matter that is patentable over the art of record.

Conclusion

This Response and the accompanying Request for Continued Examination (RCE) are intended to be a complete response to the final Office Action (Paper No. 10) mailed November 6, 2003. The Applicant respectfully requests reconsideration and allowance of all of the claims pending in the application. Correspondence and inquires concerning this case should be directed to the below signed attorney.

Respectfully submitted,

By: _____

Randall K. McCarthy, Registration No. 39,297
Bill D. McCarthy, Registration No. 26,772
Daniel P. Dooley, Registration No. 46,369
Mitchell K. McCarthy, Registration No. 38,794
Fellers, Snider, Blankenship, Bailey and Tippens
100 N. Broadway, Suite 1700
Oklahoma City, Oklahoma 73102
Telephone: (405) 232-0621
Facsimile: (405) 232-9659